CLAIMS

What is claimed is:

1. A system that facilitates mobile communications, comprising:

a transceiving component that is coupled to a first wireless communication device, the transceiving component receives a modulated signal from the first wireless communication device; and

an extendable component that is coupled to the transceiving component *via* a non-galvanic interface, the transceiving component conveys the modulated signal to the extendable component *via* electromagnetic induction, the extendable component transmits the signal to at least one other wireless communication device.

2. The system of claim 1, the transceiving component is an active stub.

3. The system of claim 2, the active stub comprises at least one active element, respective active elements are associated with disparate resonant frequencies.

4. The system of claim 3, the at least one active element comprises at least one of a meander line conductor and a helical conductor.

5. The system of claim 1, the extendable component is a parasitic whip.

6. The system of claim 1, the extendable component is tuned to operate at a frequency based on a length of the extendable component and an amount of overlap between the transceiving component and the extendable component.

7. The system of claim 1, the extendable component resonates at 800 MHz and 1900 MHz when the extendable component is about 60-120 mm in length and overlaps the transceiving component by about 4-6 mm.

8. The system of claim 1, the extendable component is detuned *via* positioning the extendable component in a retracted location relative to the transceiving component.

9. The system of claim 8, the extendable component is detuned by at least one of a matching network and de-coupling the extendable component and the transceiving component *via* a non-conductive end of the extendable component.

10. The system of claim 1 is employed in connection with at least one of a cellular phone, a PDA, a handheld computer, a notebook computer, and a pager.

11. The system of claim 1, the extendable component further receives a signal from at least one other wireless communication device, the signal is inductively transferred to the transceiving component, which conveys the signal to the first wireless communication device.

12. A multi-frequency antenna for a mobile device, comprising:

an active stub tuned to resonate at multiple frequencies; and

a parasitic whip coupled to the active stub, the parasitic whip receives a signal resonating within the tuned frequency band of the active stub and inductively transfers the signal to the active stub, which provides the signal to the mobile devices processing circuitry.

13. The system of claim 12, the active stub comprises at least two meander line conductors and the parasitic whip is aligned substantially parallel to and between the meander line conductors.

14. The system of claim 12, the active stub comprises a helical conductor, and the parasitic whip is aligned through approximately the center of the helical conductor.

15. The system of claim 12 is employed in connection with at least one of a cellular phone, a PDA, a handheld computer, a notebook computer, and a pager.

16. The system of claim 12, the parasitic whip is tuned to the frequency based on an amount of overlap with the active stub and a size of the parasitic whip.

17. The system of claim 12, the parasitic whip is tuned to receive signals within the 800 MHz and 1900 MHz band when a length of the parasitic whip is about 60-120 mm and an overlap with the active stub is about 4-6 mm.

18. The system of claim 12, the parasitic whip is detuned *via* retracting the parasitic whip relative to the active stub.

19. The system of claim 12, the parasitic whip further inductively receives a signal from the active stub and transmits the signal to at least one other mobile device.

20. A method for transmitting a radio frequency signal from a wireless communications device comprising:

extending a parasitic whip to overlap an active stub;

providing the active stub with the radio frequency signal from the wireless communications device;

inducing a current in the parasitic whip; and

transmitting the signal utilizing both the active stub and the parasitic whip.

21. The method of claim 20 further comprises detuning the parasitic whip by retracting the parasitic whip.

22. The method of claim 20, transmitting the signal *via* the active stub when the parasitic whip is detuned.

23. A method for receiving a radio frequency signal at a wireless communications device comprising:

extending a parasitic whip to overlap an active stub;

receiving a signal utilizing both the parasitic whip and the active stub when the parasitic whip is extended; and

providing the received signal to the wireless communications device *via* the active stub.

24. The method of claim 23 further comprising detuning the parasitic whip by retracting the parasitic whip.

25. The method of claim 24, receiving the signal *via* the active stub when the parasitic whip is detuned.

26. A system that transmits and receives radio frequency signals comprising:

means for configuring an active stub to transmit and receive data at a frequency; and

means for enhancing the ability of the active stub to transmit and receive data employing a parasitic whip.